NCR: Y	es / N	0			WORK ORDER NON-	CON	IFORN	MANCE / UP	DATE	QA Closed:	Dat	e:						
Work Orde	er:				DISPOSITION				AGAINST DEPARTMENT/PROCESS									
Part N	lo				Rework Scrap Use-as-is		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing			1	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other						
NCR <sub>.</sub> N	lo				Work Order Update			Large Fab	Composite		Supplier							
Root				Descri	ption of work order update	11	nitial	Act	tion	Sign &								
Cause	Dat	e Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	n QC Inspector						
Doc/Data	_																	
Equip/Tooling																		
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Process	_	İ	·			1	·											
Supplier																		
Training		1																
Unapproved						<u> </u>												
					F	AUL	T CATE	GORY										
Landir	ng Gear			_	General					7	i							
	Bendi	ng			Bend	-	Grain			Ovalized		Pressure/Forced						
	Centre	Not Conce	entric to	o/s	BOM/Route	Ш	Hardwa	re		Over/Under		Temperature/Cure						
	Crack	i			Broken/Damaged	Ц		on Incomplete		Part Incorre	ct	Weld						
		ed/Crimped	l.		Burrs	Ш		icns Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled						
	Cuffs				Contamination		Mainte			Part Moved								
ļ	Heat <sup>-</sup>	reat			Countersink		Mislabe	eled		Positioned V		_						
	Inspe	tion Strip in	n Tube ়		Cut Too Short		Misread	d		Power Loss/	Surge	Other						
	Ripple	s in Bend			Drill Holes		Offset											
	Torque Waves in Extrusion				Drawing		Out of (	Calibration										

Out of Sequence

Outside Dimensions

DQA:

Date:

Turning Sequence

Wave/Twist in Tube

Finish

Folio

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Quality Control

												DQA:	Da	te:	\$'				
NCR:	Yes	/ No				WORK ORDER NON-	100	<b>VFORM</b>	MANCE / UP	DATE		-							
		•							-		C	QA Closed:	Da	te:					
Work Orde	ar.					DISPOSITION		AGAINST DEPARTMENT/PROCESS											
VVOIR OIG	٠					Rework	7		Skid-tube	Crosstube	٦		Water Jet		Engineering				
Part I	۷o.					Scrap	1 1		Machining	Small Fab	┪	Proc	l. Eng. Coor.		Quality				
	•0.				····	Use-as-is	1 1		noforming	Finishing	┪		e/Packaging	-	Other				
NCR I	Vo.									Composite	┨	•	Supplier	-					
							_		·										
Root					Descri	ption of work order update	T	Initial	Ac	tion		Sign &							
Cause		Date	Step	Qty	(	or Non-conformance	Ch	nief Eng	Desc	ription	$\perp$	Date	Verificatio	n	QC Inspector				
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Landi	ng (	Gear				General	_	7		_	_			_	1				
Bending						Bend	L	Grain				Ovalized		$\vdash$	Pressure/Forced				
		Centre No	ot Concer	ntric to	o/s	BOM/Route	L	Hardware				Over/Under tolerance			Temperature/Cure				
,	_	Cracks				Broken/Damaged	$\perp$	Inspect	ior: Incomplete	L	-	Part Incorrect			Weld				
		Crushed/Crimped. Bu				Burrs	1	Instruct	'Unclear	- [1	Part Lost/Missing			Wrong Stock Pulled					

Maintenance

Out of Calibration
Out of Sequence

Outside Dimensions

Mislabeled Misread

Offset

Part Moved
Positioned Wrong

Power Loss/Surge

Other

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish Folio

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

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Work Orde September-13-12				*900					Page 3				
Revision ID:	D2010-103  Mirror Arm, 5	500		Accept	*N9000	<b>00</b> °	k Se	tup Sta		*NS1* *NS2*			
Start Date: Required Date: Reference:	9/12/12 10/05/12	Start Qty: 5.00 Req'd Qty: 5.00	*5* *5*		Cust Item II Customer:	D:							
Approvals:		an:	Date:	Tooling: SPC (Y/N):	Da			Ri		art op	*NF	२1* २2*	
Sequence ID/ Work Center II  160 *160* Packaging Packaging	)	Operation Description Identify as per dwg & St	tock Location	Set Up/ Run Hours 0.00	Tool ID			Accept Qty	Reject Qty			Insp. Stamp	-99 )
170 *170* QC Quality Control		QC21- Final Inspection  Memo	- Work Order Release	0.00				MU	)_ <i>I</i> Z·		-28 Mr M	- 2-6	25

NCR: Y	·																			
												QA Closed:	Date:							
Work Order:										AGAINST DEPARTMENT/PROCESS  Still to the Conceptube Conceptub Conc										
Part N						Rework Scrap Use-as-is		ſ	Skid-tube Machining noforming	Crosstube Small Fab Finishing	-	Water Jet  I. Eng. Coor.	Engineering Quality Other							
NCR N	o						Work Order Update			Large Fab	Composite	Rec/3tol	Rec/Store/Packaging Other Supplier							
Root					Desc	rip	tion of work order update	ı	nitial	Acti	ion	Sign &								
Cause		Date	Step	Qty		0	r Non-conformance	Ch	ief Eng	Descri	iption	Date	Verification	QC Inspector						
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Landir	ng G	ear					General		- Y.		_			_						
ſ		Bending					Bend		Grain			Ovalized		Pressure/Forced						
		Centre No	t Concer	ntric to	o/s		BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure						
•	П.	Cracks			ſ		Broken/Damaged		Inspecti	on Incomplete		Part Incorre	ct	Weld						
		Crushed/C	Crimped.				Burrs		Instruct	ions Incomplete/U	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled						
ľ	7	Cuffs			Ī		Contamination		Mainte	enance		Part Moved								
Ì		Heat Treat	t		Ì		Countersink	Г	Mislabe	led		Positioned V	Vrong							
ļ	$\exists$	Inspection	Strip in	Tube	ļ		Cut Too Short		Misread	i		Power Loss/	Surge	Other						
t	Ripples in Bend						Drill Holes	Г	Offset				<u> </u>							
ļ		Torque W		xtrusio	n t		Drawing		Out of (	Calibration										
Ì	_				t		Finish		-1	Sequence										
							Folio		4	Dimensions										

DQA:

Date:

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September-13-12 9:12:53 AM

Work Order ID:

90001

Parent Item:

D2010-103

Parent Item Name:

Mirror Arm, 500

**Start Date:** 9/12/12

Required Date: 10/05/12

Start Qty: 5.00

Required Qty: 5.00

Comments:

IPP: F02.08.21Re-format; Added D2057 KJ/RF

IPP Rev:G 08-05-27 as per ECN1195P DD verified by:EC IPP Rev:H 08-06-20 rev D as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<b>M304TR0.500W.049</b> 304 RD Tube .500 x .049V	v	Purchased	No			100	f	184.9311	1.5	7.894737	S	AO_1	الاه عال ال
				<b>Location</b>		Loc Qty	Lo	oc Code					
				MAT017 11	7598	184.93111			1.5	<u> </u>			
					814	2.23							
				115	010	109.254058							
					087	7.359			-				
				120	633	66.088052			15.	1370 13	150		
2057		Manufactured	No			110	Each	10.0000	1	5		<u> </u>	-0.2-2
Plug									4			:	0_2_2
				<b>Location</b>		Loc Qty	<u>L</u>	oc Code	o=	•			
				GA &	6724	10							
				718	888	3							
				750	.=.	_			73				

NCR:	NCR: Yes / No WORK ORDER NON-CONFORMANCE / UPDATE														
											QA Closed:	Date	):		
Work Order:						DISPOSITION		AGAINST DEPARTMENT/PROCESS							
Part N			<del>- 1</del>		<u>-</u>	Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite				Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other		
., .						TVOIN Grace Spaare				composite [					
Root					Descri	ption of work order update		nitial	Act	ion	Sign &				
Cause		Date	Step	Qty	(	or Non-conformance	Chi	ef Eng	Descr	ription	Date	Verification	QC Inspector		
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Equip/Tooling															
Operator	Н														
Material	Ш	·													
Setup	$\square$					•									
Other	Н														
Process	Н														
Supplier	Н														
Training Unapproved	Н														
onapproved				<u>.                                    </u>	<u>L</u>	E/	L	CATE	L		L		1		
Landi	ng G	ear	<del></del>			General		CATE	-						
		Bending				Bend		Grain			Ovalized		Pressure/Forced		
	_	Centre No	t Concer	ntric to	o/s	BOM/Route	$\vdash$	Hardwa	ire		Over/Under	tolerance	Temperature/Cure		
	П	Cracks				Broken/Damaged	$\square$	Inspect	ion Incomplete		Part Incorre	<u> </u>	Weld		
	П	Crushed/0	Crimped.			Burrs	-	-	tions Incomplete/l	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled		
	П	Cuffs				Contamination	П	Mainte	enance		Part Moved	_			
		Heat Trea	t			Countersink		Mislabe	eled		Positioned V	Vrong			
	ı	nspection	n Strip in	Tube		Cut Too Short		Misread	d		Power Loss/	Surge	Other		
		Ripples in	Bend			Drill Holes		Offset							
	ī	Torque W	aves in E	xtrusio	n 🗀	Drawing		Out of (	Calibration						
	Turning Sequence					Finish		Out of S	Sequence						

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

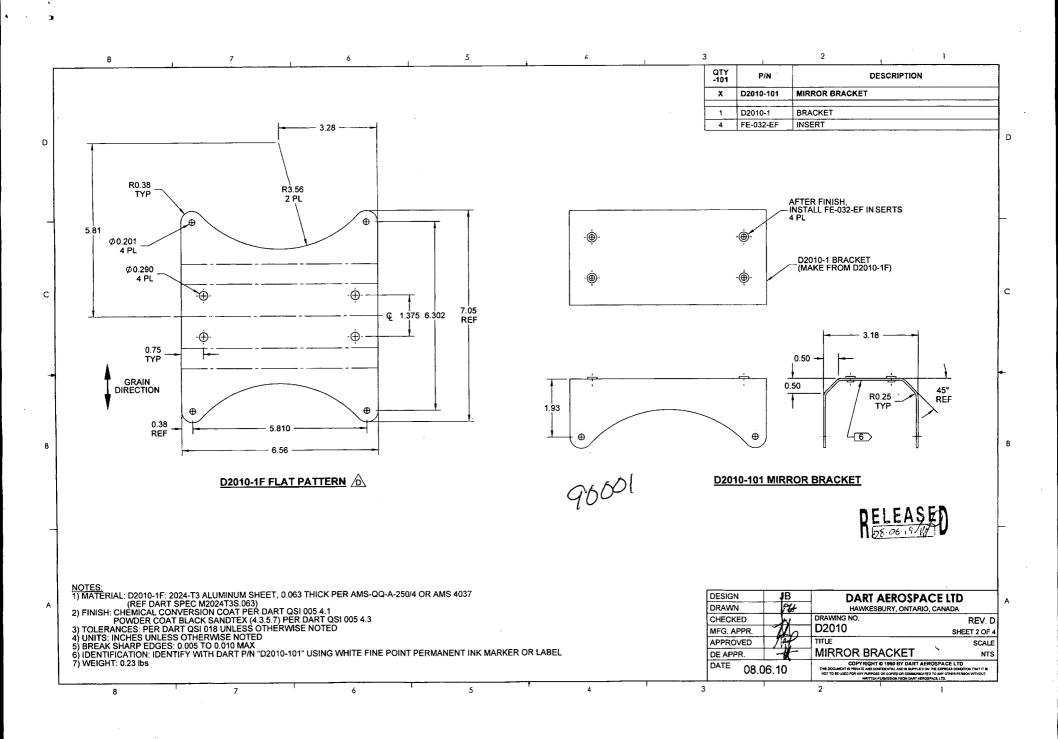
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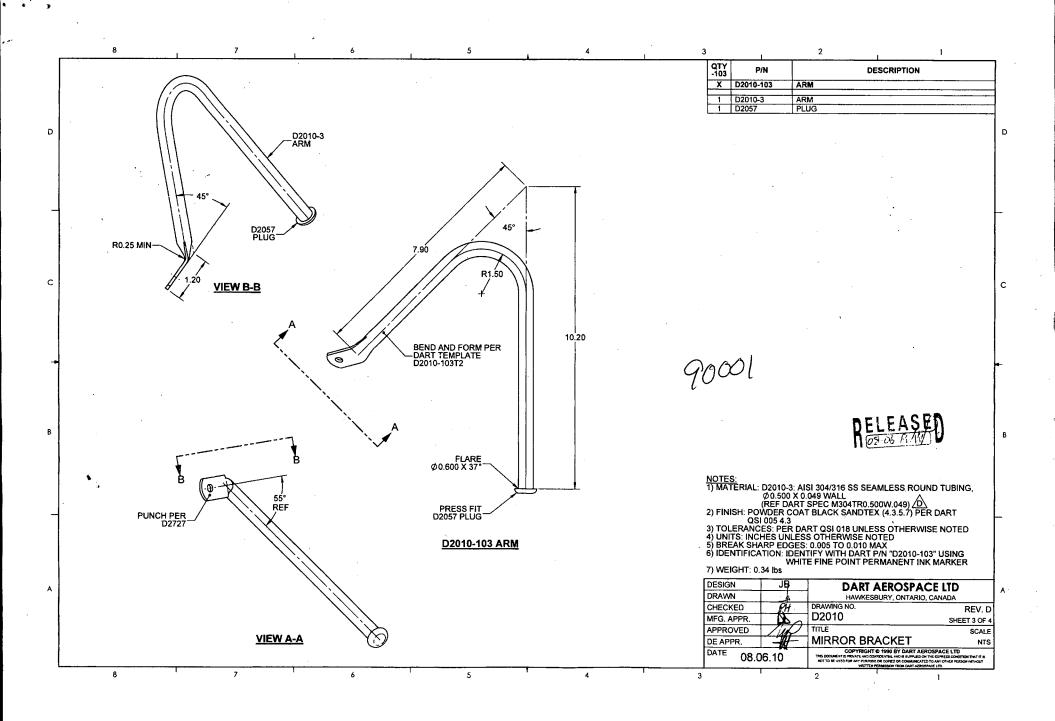
9601 **D2010-101 MIRROR BRACKET** D2010-104 ARM D2010-103 ARM REDRAWN IN SOLIDWORKS; ADD D2010-1F FLAT PATTERN FOR D2010-101 (ZN B7-2); Ø0.500 X 0.049 WALL WAS Ø0.500 X 0.035 WALL (ZN B1-3, B1-4); REASON; TUBING CRACKING DURING SERVICE 08.06.10 С 1.93 WAS 2.00; 0.50 WAS 0.62 KE 97.10.31 В 7.90 WAS 10.90 JB 92.03.17 NEW ISSUE JB 90.12.15 Α REV. DESCRIPTION DATE BY DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED REV. D D2010 MFG. APPR. SHEET 1 OF 4 APPROVED TITLE SCALE MIRROR BRACKET

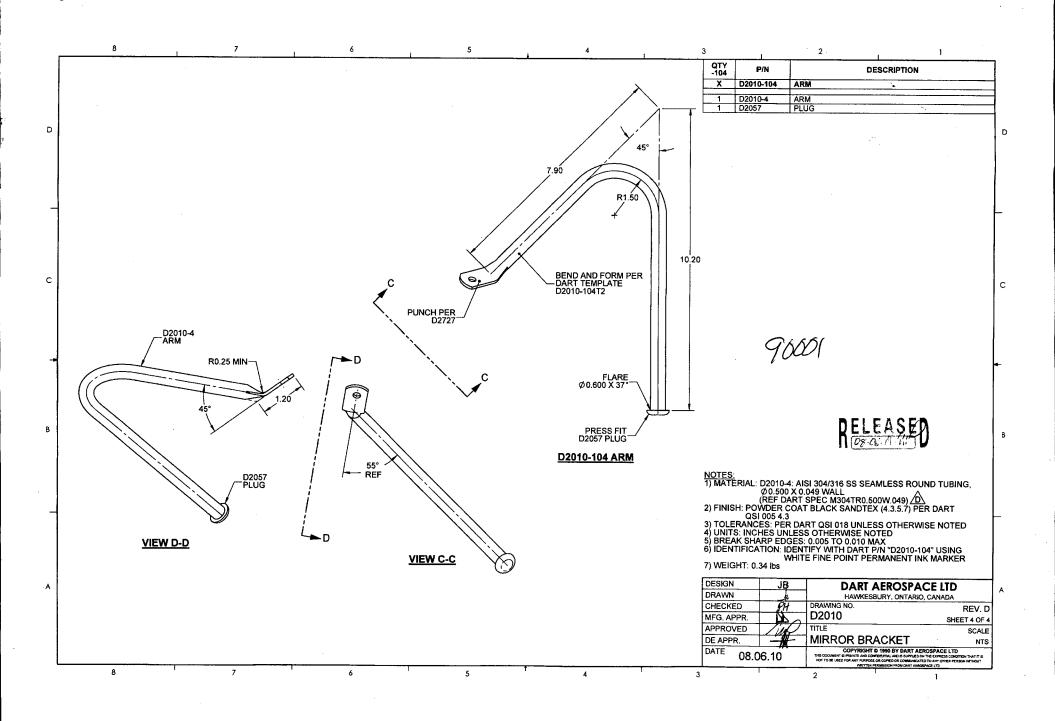
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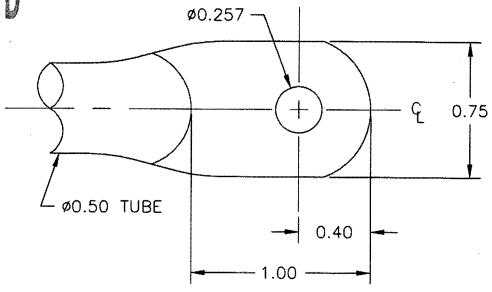


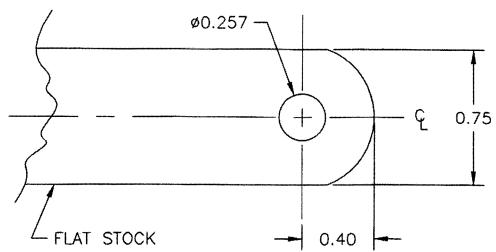
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CHECKED	N	APPROVED	DRAWING NO.	REV. A
. 1/11/	<u>U</u>		D2727 SHEET	1 OF 1
DATE			TITLE	SCALE
 97.11.	24		PUNCH DT8012 SPEC CONTROL	2:1
Α	·	97.11.24	NEW ISSUE	
AI H	CP	01.12.20	ADD TOLERANCE NOTE	

## SPECIFICATION CONTROL DRAWING FOR PUNCH DT8012

RELEASED 198103106 KE

96661





NOTE: TOLERANCES ARE PER DART OSI 018 UNLESS OTHER WISE NOTED.

